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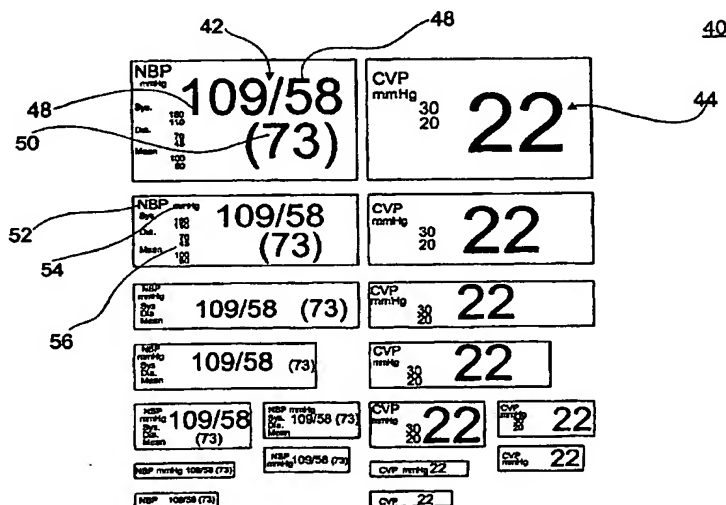
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(54) Title: METHOD OF OPTIMIZING THE PRESENTATION ON A DISPLAY SCREEN OF FREELY POSITIONABLE AND SCALABLE OBJECTS



(57) Abstract: The invention relates to a method of optimizing the presentation on a display screen of objects of a user interface which can be freely positioned and scaled by means of control elements. This is realized by means of a predetermined calculation rule in such a manner that the objects can be automatically varied between a still readable minimum size and a selected maximum size in dependence on the object contents, selected preferred settings and the available display resource on the display screen, and that the available display screen surface is optimally filled, possibly while eliminating less important details of the object contents and while changing the display mode of the object contents and/or the object as well as while avoiding mutual overlapping of the objects.



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# INTERNATIONAL SEARCH REPORT

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**A. CLASSIFICATION OF SUBJECT MATTER**  
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**B. FIELDS SEARCHED**

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Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, INSPEC

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 820 002 A (IBM) 21 January 1998 (1998-01-21) abstract column 1, line 5 -column 5, line 42 column 6, line 14 -column 10, line 46 figures 1-8	1-14
X	US 5 880 725 A (SOUTHGATE TIMOTHY JAMES) 9 March 1999 (1999-03-09) abstract column 1, line 10 -column 3, line 55 column 4, line 42 -column 15, line 9 figures 1-16B	1-14
A	US 5 684 969 A (ISHIDA EIJI) 4 November 1997 (1997-11-04) the whole document	1

☒ Further documents are listed in the continuation of box C.

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5 796 403 A (HOLLAND RICHARD C ET AL) 18 August 1998 (1998-08-18) column 1, line 32 -column 2, line 47 column 6, line 56 -column 8, line 3 figures 5,6 -----	1-4,6
A	ELLIS S. COHEN, A. MICHAEL BERGMAN, MARK R. BIGGERS, JOSEPH C. CAMARATTA, KEVIN M. KELLY: "Automatic Strategies in the Siemens RTL Tiled Window Manager" 1988, SIEMENS RESEARCH & TECHNOLOGY LABORATORIES, 105 COLLEGE ROAD EAST, PRINCETON XP002263461 the whole document -----	1
A	WO 00 63768 A (SHEASBY MICHAEL C ;AVID TECHNOLOGY INC (US)) 26 October 2000 (2000-10-26) page 6, line 7 -page 10, line 28 figure 14 -----	7,12

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/B 03/02100

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
EP 0820002	A	21-01-1998	US 5920315 A DE 69716186 D1 DE 69716186 T2 EP 0820002 A1	06-07-1999 14-11-2002 12-06-2003 21-01-1998
US 5880725	A	09-03-1999	US 5561757 A US 5487143 A	01-10-1996 23-01-1996
US 5684969	A	04-11-1997	JP 5080967 A	02-04-1993
US 5796403	A	18-08-1998	AU 721185 B2 AU 4582997 A EP 0928449 A1 JP 2001501006 T WO 9813748 A1	22-06-2000 17-04-1998 14-07-1999 23-01-2001 02-04-1998
WO 0063768	A	26-10-2000	AU 3951300 A WO 0063768 A1	02-11-2000 26-10-2000